LISTING OF THE CLAIMS:

The claims are listed as follows with <u>no</u> claim amendments:

1. (Previously Presented) A method of developing actual resources without alteration into a collection of virtual resources customized to a particular audience, said method comprising:

       constructing at least one virtual resource independent of an actual resource;

       storing the virtual resource in a tangible computer readable media, using a processor on a computer;

       connecting the actual resource to the at least one virtual resource;

       retrieving the at least one virtual resource from the tangible computer readable media; and

       extracting at least one descriptor from said at least one retrieved virtual resource,

       wherein said virtual resource comprises a resource utilized at a logic authoring time, while said actual resource comprises a resource utilized at a runtime.

2. (Previously Presented) The method of claim 1, wherein said connecting comprises directly mapping the at least one actual resource to the at least one virtual resource, and

       wherein the constructing the at least one virtual resource comprises including constraints upon the virtual resources without altering the actual resources.

3. (Original) The method of claim 1, wherein the constructing comprises at least one of:

       renaming a method;

       hiding a method;

       composing a method;

renaming an attribute;

hiding an attribute;

composing an attribute;

assigning to at least one domain;

designating as a collection;

assigning to at least one validator;

assigning a description;

designating as at least one of ready and not ready; and

assigning a last modified date and time.

4. (Previously presented) The method of claim 1, wherein said at least one virtual resource

comprises a plurality of virtual resources and said virtual resources are connected to each

other through a relationship carrying semantic that can be leveraged by a consumer of

resources, said method further comprising:

constructing at least one virtual relationship between at least two virtual resources;

coupling at least one actual relationship implementor to at least one virtual

relationship;

performing at least one retrieval of a virtual relationship; and

extracting at least one descriptor from at least one retrieved virtual relationship.

5. (Original) The method of claim 4, wherein said coupling comprises:

directly mapping said at least one actual relationship implementor to said at least one

virtual relationship.

6. (Previously presented) The method of claim 4, wherein the relationship constructing

comprises at least one of:

      assigning a root virtual resource name;

      assigning a target virtual resource name;

      assigning a relationship name;

      assigning a relationship type;

      assigning a description;

      assigning a target instance naming scheme;

      designating as at least one of ready and not ready; and

      assigning a last modified date and time.

7. (Original) The method of claim 4, wherein the retrieving comprises locating virtual

relationships by at least one of:

      a domain;

      a name;

      a root;

      a type; and

      a target.

8. (Previously Presented) The method of claim 1, wherein virtual resources are connected to

each other, said method further comprising:

      constructing at least one virtual relationship between at least two virtual resources;

      coupling at least one actual relationship implementor to at least one virtual

relationship;

performing at least one retrieval of a virtual relationship; and

extracting at least one descriptor from at least one retrieved virtual relationship,

wherein said coupling comprises directly mapping said at least one actual relationship

implementor to said at least one virtual relationship.

9. (Previously Presented) The method of claim 1,wherein information constructing the at least

one virtual resource includes data independent from the actual resource, the method further

comprising:

selectively manipulating the retrieved virtual resource by updating or deleting at least

a portion of the retrieved virtual resource; and

authoring the virtual resource into a logic code stored and executable by the computer.

10. (Previously presented) The method of claim 8, wherein the relationship constructing

comprises at least one of:

assigning a root virtual resource name; assigning a target virtual resource name;

assigning a relationship name;

assigning a relationship type;

assigning a description;

assigning a target instance naming scheme;

designating as at least one of ready and not ready; and

assigning a last modified date and time.

11. (Original) The method of claim 1, wherein the retrieving comprises locating virtual

resources by at least one of:

a domain;

a name; and

a relationship.

12. (Previously presented) The method of claim 8, wherein the retrieving comprises locating

virtual relationships by at least one of:

a domain;

a name;

a root;

a type; and

a target.

13. (Previously presented) The method of claim 2, wherein descriptor validator information is

employed to limit actual resource usage.

14. (Previously Presented) A system for developing actual resources without alteration into a

collection of virtual resources customized to a particular audience, said system comprising:

means for constructing at least one virtual resource independent of at least one actual

resource, using a processor on a computer;

means for connecting at least one actual resource to at least one virtual resource;

means for retrieving said at least one virtual resource; and

means for extracting at least one descriptor from said at least one retrieved virtual

resource,

wherein said virtual resource comprises a resource utilized at a logic authoring time while said actual resource comprises a resource utilized at a runtime.

15. (Original) The system of claim 14, wherein said means for connecting comprises means for directly mapping the at least one actual resource to the at least one virtual resource.

16. (Original) The system of claim 14, wherein the means for constructing performs at least one of:

        renaming a method;

        hiding a method;

        composing a method;

        renaming an attribute;

        hiding an attribute;

        composing an attribute;

        assigning to at least one domain;

        designating as a collection;

        assigning to at least one validator;

        assigning a description;

        designating as at least one of ready and not ready; and

        assigning a last modified date and time.

17. (Previously presented) The system of claim 14, wherein virtual resources are connected to each other through a relationship carrying semantic that can be leveraged by a consumer of resources, comprising:

means for constructing at least one virtual relationship between at least two virtual

resources;

means for coupling at least one actual relationship implementor to at least one virtual

relationship;

means for performing at least one retrieval of a virtual relationship; and

means for extracting at least one descriptor from at least one retrieved virtual

relationship.

18. (Original) The system of claim 17, wherein said means for coupling comprises:

means for directly mapping said at least one actual relationship implementor to said at

least one virtual relationship.

19. (Previously presented) The system of claim 17, wherein the means for constructing at least

one virtual relationship performs at least one of:

assigning a root virtual resource name;

assigning a target virtual resource name;

assigning a relationship name;

assigning a relationship type;

assigning a description;

assigning a target instance naming scheme;

designating as at least one of ready and not ready; and

assigning a last modified date and time.

20. (Original) The system of claim 14, wherein the means for retrieving performs locating

virtual relationships by at least one of:

       a domain;

       a name;

       a root;

       a type; and

       a target.

21. (Previously presented) The system of claim 14, wherein virtual resources are connected to

each other, said system further comprising:

       means for constructing at least one virtual relationship between at least two virtual

resources;

       means for coupling at least one actual relationship implementor to at least one virtual

relationship;

       means for performing as least one retrieval of a virtual relationship; and

       means for extracting at least one descriptor from at least one retrieved virtual

relationship.

22. (Original) The system of claim 21, wherein said means for coupling comprises: means for

directly mapping said at least one actual relationship implementor to said at least one virtual

relationship.

23. (Previously presented) The system of claim 21, wherein the means for constructing a

relationship comprises at least one of:

means for assigning a root virtual resource name;

means for assigning a target virtual resource name;

means for assigning a relationship name;

means for assigning a relationship type;

means for assigning a description;

means for assigning a target instance naming scheme;

means for designating as at least one of ready and not ready; and

means for assigning a last modified date and time.

24. (Original) The system of claim 21, wherein the means for retrieving comprises locating

virtual resources by at least one of:

a domain;

a name; and

a relationship.

25. (Original) The system of claim 21, wherein the means for retrieving comprises locating

virtual relationships by at least one of:

a domain;

a name;

a root; and

a target.

26. (Previously presented) The system of claim 15, wherein descriptor validator information is

employed to limit actual resource usage.

27. (Previously Presented) A service to manage descriptions of actual resources in a system

comprised of a plurality of actual resources, said service comprising:

defining at least one virtual domain to satisfy a user-requirements analysis; and

defining, by a processor, at least one virtual resource describing as least one actual

resource within the at least one virtual domain to satisfy the user-requirements analysis,

wherein said virtual resource comprises a resource utilized at a logic authoring time

while said actual resource comprises a resource utilized at a runtime,

wherein said virtual resource is stored on a tangible computer readable media

accessible by the processor,

wherein said defining the at least one virtual resource relates in part to the actual

resource and in part independent of the actual resource, and

wherein said defining the at least one virtual resource comprises creating and then

manipulating the virtual resource at least in part independent of the actual resource.

28. (Previously presented) The service of claim 27, further comprising:

analyzing a requirement for actual resource usage, to provide said user requirements

analysis.

29. (Original) The service of claim 27, further comprising:

defining at least one virtual relationship between at least two virtual resources.

30. (Previously presented) The service of claim 29, wherein at least one of a virtual resource

and a virtual relationship is utilized to create an application program.

31. (Previously Presented) A method of deploying computing infrastructure in which computer readable code is integrated into a computing system, such that said code and said computing system combine to perform a method of developing said actual resources without alteration into a collection of virtual resources customized to a particular audience, said method comprising:

      constructing at least one virtual resource independent of said actual resources;

      connecting at least one actual resource to at least one virtual resource;

performing at least one retrieval of a virtual resource; and

      extracting at least one descriptor from said at least one retrieved virtual resource, wherein said virtual resource comprises a resource utilized at a logic authoring time and said actual resource comprises a resource utilized at a runtime.

32. (Previously Presented) A tangible computer-readable storage medium tangibly embodying a program of machine-readable instructions executable by a digital processing apparatus to perform a method of developing said actual resources without alteration into a collection of virtual resources customized to a particular audience, said method comprising:

      constructing at least one virtual resource independent of said actual resources;

      connecting at least one of said actual resources to said at least one virtual resource;

      performing at least one retrieval of said virtual resource; and

      extracting at least one descriptor from said at least one retrieved virtual resource,

      wherein said virtual resource comprises a resource utilized at a logic authoring time and said actual resource comprises a resource utilized at a runtime.

33. (Previously Presented) A method of developing actual resources without alteration into a

collection of virtual resources customized to a particular audience, said method comprising:

> constructing at least one virtual resource independent of an actual resource; and

> providing in the at least one virtual resource a structured meta-data layer which

contains semantic information for leveraging by a consumer of the virtual resources,

> wherein said virtual resource comprises a resource utilized at a logic authoring time

while said actual resource comprises a resource utilized at a runtime.

34. (Original) The method of claim 33, wherein said semantic information includes

relationships with agreed upon semantics including any of "related-to", "contains", and "is-

conflicting-with", between entities.

35. (Previously Presented) The method of claim 33, wherein said semantic information allows

any of making new resource manipulation operations available to logic authoring tools and

serving as an input to a conflict detection tool, and

> wherein a common layer is provided to resource utilizing tools comprising the logic

authoring tools to directly access the virtual resource.

36. (Previously Presented) The method of claim 1, further comprising:

> creating at least one virtual resource instance;

> assigning an identity to the at least one virtual resource instance;

> associating the at least one virtual resource instance with one virtual resource; and

> translating the retrieved virtual resource into an actual resource utilized at runtime.

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37. (Original) The method of claim 4, further comprising:

      creating at least one virtual relationship instance;

      assigning an identity to the at least one virtual relationship instance; and

      associating the at least one virtual relationship instance with one virtual relationship.